FUNDEMENTALS OF IT & PROGRAMMING

ASSIGNMENT -1

1what are the four fundamental parts of computer? Explain it with the help of diagram.

The four fundamental parts of computer are ,

- CPU (CENTRAL PROCESSING UNIT)
- MOUSE
- MONITER
- KEYBOARD

CPU

- The central processing unit is also called as central processor, is the electronic circuit within a computer that executes instructions yhat make up a computer program.
- It stores data ,intermediate results and instructions and controls the operaton of all parts of the computer.

MOUSE

Mouse is an input device used with the computer. Moving the mouse along the flat surface used to move the curser and clicking the mouse helps to select the different items on the screen .

MONITER

A computer moniter is a output device that displays the information in the pictorial form.

KEYBOARD

The keyboard is an type writer device with the arrangement of keys and buttons as an electronic switches.

2.Disscuss about the classification of the computer based on the size and capacity .

Based on size and capacity, computers are classified as follows:

• Super Computers

 • Mainframe Computer

• Mini Computers

• Micro Computers

SUPER COMPUTERS

Supercomputers are the most powerful and physically the largest by size. These are systems designed to process huge amounts of data. The fastest supercomputers can perform over one trillion calculations in a second.they have thousands of processors.

Eg:**JAGGUAR & ROAD RUNNER**

MAINFRAME COMPUTER

Mainframe computers are very large often filling an entire room and can process thousands of millions of instructions per second.

Some of the functions performed by a mainframe include: flight scheduling, reservations and ticketing for an airline etc..

Example: IBM mainframe z13and IBM System z9 mainframe

MINI COMPUTER

Mini computers are smaller than main frame computer .less expensive Midrange computers are usually used by small and medium-sized businesses as their servers . Users connect to the server through a network by using desktop computers

Eg:Apple ipod and CDC 160A

MICRO COMPUTER

Microcomputers are the most frequently used type of computer. It is also, known as Personal Computer (PC) . A microcomputer is a small computer system designed to be used by one person at a time.

Eg: persnol computer and laptops.

3.what is the meaning of coputer generation ? and how many computer generation are defined ? what technologies were used?

COMPUTER GENERATION

Evolution of the computer is defined as the generation.Each generation is characterized by dramatic improvements over the previous generation in the technology used to build computers, in terms of the internal organization of computer and programming

There are 4 generations of computer,

- First generation (1941-56)
- Second generation (1956-63)
- Third generation (1964-71)
- Fourth generation(1971-present)

FIRST GENERATION COMPUTERS

they are based on vaccum tube and magnetic drums for memory.

Eg:**UNIVAC &ENIAC**

SECOND GENERATION COMPUTER

Second generation is based on the transistors .it helps to change the vaccum tube .

THIRD GENERATION COMPUTER

It is based on the integrated circuit this is the hallmark of this generation.

FOURTH GENERATION COMPUTERS

Thesw are based on the microprocessor,built with the single silicon chip.

4.**Diffrencite between volatile and non volatile memory.**

VOLATILE MEMORY	NON VOLATILE MEMORY
- RANDOM ACCESS MEMORY(RAM)IS called as volatile memory. - It stores only a temporary memory - It stores many data in MB's - It helps in calculating data faster .	- READ ONLY MEMORY (ROM)IS called as a non volatile memory. - It helps to store a permanent memory - It stores data in GB's - It writes data slower.

5.**Distinguish betweensystem software,application software and open sourse software on the basis of their features.**

System software	Application software	Open sourse software
it is a type of software to design the computer hardware and computer programs. System software is an interface between hardware and user application.	It is created for specific purpose by the user.it is an application or an app**.** **Eg : WORD PROCESSOR**	**In** this type sourse code is released under a licence. The linux operation system is the best example.

7.**create a file in MS WORD to insert a paragraph about yourself and save it with the file name " yourself". Describe the steps involved in it.**
TO CREATE A NEW DOCUMENT
- Click the Microsoft office button or a file tab.
- Select the New option . a new dialogue box appears.
- Select the blank document . the new dialogue box will appear with the default.
- New blank document appears in the window.
- Now create a document by inserting a text.
- Now type a paragraph
- Im kaviya.r from Dharmapuri ,i completed my school with 90percent in sri vijay vidyalaya matric higher sec. School [girls] in dpi and now i am doing computer science cource.
- Finally save the document

.TO SAVE THE DOCUMENT USING SAVE AS COMMAND

- Select the Microsoft office buton or file tab
- Select **save as** WORD DOCCUMENT
- Enter the file name as"YOURSELF"
- Select the location where you have to save the document
- Click the save button.

6.write the steps regarding the following

To change font style

To change font size

To change font colour

To highlight (in yellow)the line that reads "need to get IMS'S address"

TO CHANGE THE FONT STYLE

- Select the text you want to modify.
- Click on font style box on the Home tab.
- The font style drop-down menu appears.
- Move your cursor over the various font styles.
- Left-click the font style you want to use.
- Then font style will change in the document.

TO CHANGE THE FONT SIZE

- Select the text you want to modify.
- Click on font size box in the Font group on the Home tab.
- The font size drop-down menu appears.
- Move your cursor over the various font sizes.
- Left-click on font size you want to use.
- Then it will change font size in your document.

TO CHANGE THE FONT COLOUR

- Select the text u want to modify
- Click on the font colour in the font group of the document
- Various font colour appears
- Move on the courser over various font colour.
- Click on the font colour you want to use.
- Then it will change the font colour

TO HIGHLIGHT (IN YELLOW)THE LINE THAT READS " need to get IMS'S address"

- Select the text **" need to get IMS'S address"**
- Click on the Text Highlight colour in font group on the Home tab.
- Various colours will appears Move your cursor over the various colours.
- Click on yellow colour
- Then text highlight colour will change in the document.

"need to get IM'S address"

8.create a file in the ms word for the following statement and save it with the file name "equations'describe all steps involved in it.

Equations

$X_2+Y_5=30$

$Z^3+Q^4=50$

$A_2+B^8=X_2+Y^8$

TO CHANGE THE TEXT IN SUBSCRIPT

- Select the text you want to modify.
- Click on the subscript command on the Home tab.
- Then It will change the text as subscript in the document.

TO CHANGE THE TEXT IN SUPERSCRIPT

- Select the text you want to modify.
- Click on the superscript command on the Home tab.
- Then It will change the text as superscript in the document

$X_2+Y_5=30$

$Z^3+Q^4=50$

$A_2+B^8=X_2+Y^8$

9. Create a file in MS-word that convert existing highlight text to table as shown below and save it as file name 'text_to_table'. Describe all steps involved in it.

Select the text you want to convert.
Select the **Insert** tab.
Click on **Table** command. A dialog box appears.
Click on **Convert Text to Table, a new** dialog box appears
here set number of columns.
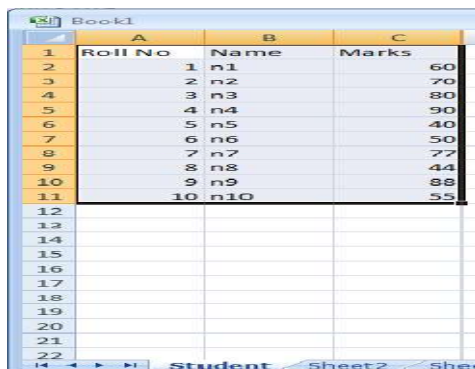Click on OK Finally Selected text convert in a table

⇩

Select the text you want to convert.	Select the **Insert** tab.
Click on **Table** command. A dialog box appears.	Click on **Convert Text to Table, a new** dialog box appears
here set number of columns.	Click on OK Finally Selected text convert in a table

- Select the text u want to modify
- Selct the insert tab
- Click on the table command .a dioalog box appears
- Click on convert text into table , a new dialog box appears set a number of column and rows.
- Click ok . finally the text is converted into a table
- Now click on the save as option
- Enter the file name as "text to table"
- Finally click on the save option. The file will be saved in the word document

10. **Create a file in MS-Word to insert a table in the document. Describe all steps involved in it.**

- **Click** the Microsoft office button or a file tab
- a new dialogue box appears
- select the insert option and select the insert table option
- select the number of rows and colums
- finally select insert .a table will appear in the screen

11. **Create a following worksheet in MS-excel and save it with name 'book1'.**

roll number	name	marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88

12. Calculate the following things of a range (C2:C11) of date in the worksheet created in question number 10.
To sum of the marks using auto sum in the range of cells (C2:C11):

First select the cell where you want to appear function then select the drop down arrow next to the AUTOSUM on the home tab, then select the sum, formula will appear where you fixed your arrow then you just enter the columns you calculate, then automatically cells range will come to that column press ok the result appears.

Average the marks in the range of cells (C1:C11):

Similarly you can calculate the average of that cell, so click on the auto sum symbol Select average the formulas appear in the selected cells then enter average will appears.

Highest marks in the range of cells (C2:C11):& minimum marks i the range of cells

Similarly you can calculate the minimum and maximum number of the cells, click on the auto sum in the home tab then click on the minimum or maximum what you want formula will appears in the cells finally enter total will appear

13 a) Describe the various steps involved in the following

To modify column width of a worksheet:

- ❖ Position the cursor over the column line in the column heading.
- ❖ A double arrow will appear.
- ❖ Left click the mouse, then drag the cursor to right to increase the column width or to left to decrease the column width.
- ❖ Release the mouse button.

To modify the row height of a worksheet:

- ❖ Position the cursor over the row line you want to modify and a double arrow will appear.
- ❖ Left click the mouse, then drag the cursor to upward to decrease the row height or downward to increase the row height.
- ❖ Release the mouse button.

To delete rows and columns of a worksheet:

- ❖ Select the row or column you want to delete.
- ❖ Click the Delete command in the cells group on the Home tab.
- ❖ Selected row or column deleted.

13 b) Describe the following terms in the worksheet

Absolute reference:

An absolute reference is designated in the formula by the addition of a dollar sign ($). It can precede the column reference or the row reference, or both

Examples: A2: The column and the row do not change when copied.

A$2: The row does not change when copied.

$A2: The column does not change when copied.

14. What tools are available to customize our PowerPoint presentation?

There are many tools available in Microsoft power point to customize. Power point is a most excellent way of presenting to an audience in visual form. It is very different one and different way of presenting your ideas. It helps the speaker and a participant to understand the topic easily.

b) Write the steps for the following action for creation of power point presentation
Open a Blank presentation

First click on the start button,

Then select the power point in Microsoft office

Then double click then power point page will open.

Save the presentation as Lab1.pptx

First you located or select the save command o the access toolbar.

If you are saving the file for first time save as command will appears on the backstage view.

Then you just choose the folder where you want to save the file and gave thet file name after words file will be saved on that folder.

Save that file name as lab1.pptx.

Add a Title to the first slide: the name of your college

Open the power point slide show page there is a visual will appears that is "click to add title" in that place move your cursor over the caption and left click then you can add your college name as a title .

Type your first name and last name in the Subtitle section

Same as your title creating there is another caption was appears that is click to add subtitle there you can give your name as a subtitle.

Add a New Slide which has a Title and Content

Here after you want to make a content go to next slide click on the new slide then new slide will appear there about your college life and your college you can prepare that as a slide show to present in front of your students.

15) Write steps for creation of a set of PowerPoint slides that demonstrates your skill to use the tools of PowerPoint. It should include the following things

Title slide &bullet list

In your slide show power point presentation there are many will going to presented by you in that time if you want to highlight some points you can add a bullets Click on the home tab there is many bullets are appears click on that to add a bullets.

Inserting Excel Sheet

Click on the insert tab on the home tab then click on the object command on the text group, than dialogue box will appear finally choose excel left click on that , excel sheet will appear on the mirror.

Clip art and Text

When you preparing a slide show you want some example pictures to explain that if you don't have those pictures in your system you can select that from a clip art which is a best option to get some pictures.

Click on the clip art command there is a text bar will appears in your right side mirror there you search those arts. Click on that art that will add to your slide show.

Slide show effects

To start the presentation at the first slide in the start slide show group click from beginning, this slide show is helps you to explain very clearly about your topics, audience also can understand easily about your presentation.

PART 2

16.WHAT IS DIFFERENCE BETWEEN MACHINE LANGUAGE AND HIGH LEVEL LANGUAGE.

MACHINE LANGUAGE	HIGH LEVEL LANGUAGE
1.Machine language refers to machine code.	1.high level language is used friendly.
2.it is a collection of binary digits or bits That the computer reads. level.	2.it is of two types,complied and interpreted. Used to convert high level language to machine

17.DISCUSS ABOUT DIFFERENT TYPES OF C PROGRAMMING LANGUAGE.

CHARACTER YHE MOST BASIC TYPE IN C .

INT:USED TO STORE INTEGER.

FLOAT:STORES DECIMAL POINT.

DOUBLE DECIMAL NUMBER.

TYPE	KEYBOARD	VALUE RANGE
	CHAR	-128TO127 (OR) 0TO255
CHAR	INT	-32TO718TO32,767
NUMBER	SMALL	-32,718TO32,767
SMALL NUMBER	LONG	-2.147,483.648
LONG NUMBER	FLOAT	1.28-38 TO3.4...6PLACES

THESE DATA TYPES ARE CALLED PRIMITIVE DATA WE CAN USE THESE DATA TYPES TO BUILD MORE COMPLEX DATA WHICH ARE CALLED USER DEFINED DATA TYPES .

EXAMPLE:STRING WILL BE THE SEQUENCE OF CHARACTER.

18.FIND OUT THE OUTPUT OF THE FOLLOWING EXPRESSIONS.

A)X=20/5*2+30-5 =ANS: *33*
B)Y=30-(40/10+6)+10 =ANS: -10
C)Z=40*2/10-2+10 =ANS:16

19.DISCRIBE THE SYNTAX OF THE FOLLOWING STATEMENT.

A)IF –ELSE STATEMENT

IF STATEMENT CAN BE FOLLOWED BY AN OPTIONAL ELSE BLOCK OF STATEMENT ,WHICH EXECUTES WHEN THE BOOLEAN EXPRESSION OF FALSE STATEMENT IS FALSE.

SYNTAX

```
IF (EXPRESSION)

{

   TRUE BLOCK OF STATEMENT;

}

ELSE

{

  ELSE BLOCK OF STATEMENT;

}
```

b)FOR LOOP

FOR LOOP IS SIMILAR TO WHILE

```
FOR (EXPRESSION1,EXPRESSION2,EXPRESSION3)

{

  BLOCK OF STATEMENT

}
```

IN THE ABOVE SYNTAX ;

EXPRESSION1:INITIALIZES VARIABLES

EXPRESSION 2:CONDIYIONAL EXPRESSION AS LONG AS THIS CONDITION IS TRUE , LOOP WILL KEEP EXECUTING.

CONDITION3:IT IS THE MODIFIER WHICH WILL INCREASE OR DECREASE THE VARIABLE.

C)WHILE LOOP

WHILE (CONDITION)

SINGLE STATEMENT;

OR

WHILE(CONDITION)

{

BLOCK OF STATEMENT;

}

DO – WHILE LOOP

{

SINGLE STATEMENT

OR

BLOCK OF STATEMENT ;

}

20)find out the output of the following statement.

A)INCLUDE<STIDO.H>   B)INCLUDE<STDIO.H>   C)INCLUDE<STDIO.H>

INT MAIN()   INT MAIN ()   VOID MAIN()

{   {   {

INT I;   INT I=1;   INT A=10,B=100;

FOR(I=1;<2;I++)   WHILE (I<=2)   IF(A>B)

{   {   PRINT("LARGEST NO.IS PERCENT

PRINT("IMS GHAZIZBAD/N');   PRINT("IMS GHAZIZBAD/N");   D/N",A);ELSE

}   I=I+1;   PRINT("LARGEST NO. IS %D/N"

}   }   ,B);

}

OUTPUT

IMS GHAZIABAD

OUTPUT

IMS GHAZIABAD

IMS GHAZIABAD

}

OUTPUT

IMS GHAZIABAD

IMS GHAZIABAD